

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per. \_\_\_\_\_

## DNA Replication Worksheet (3)

### DNA Structure

1. What type of macromolecule is DNA?
2. What are the monomer units (building blocks) of DNA?
3. What term is given to the shape of the DNA molecule?
4. What are the three parts of a nucleotide?
5. What part(s) of the nucleotide make up the backbone (sides) of the DNA molecule?
6. What part(s) of the nucleotide make up the rungs (middle) of the DNA molecule?

DNA: Fill in the table below.

	Bases	Sugar	Relative Size & Number of Strands	Location
DNA			Long or short? ____ strands	Nucleus? _____ Cytoplasm? _____

### DNA Replication

7. What is the purpose of DNA replication?
8. What is the end result of DNA replication?

9. In DNA Replication:

A pairs with \_\_\_\_\_ and C pairs with \_\_\_\_\_

**Directions:** Below are five (3) different DNA sequences:

- In the original DNA row of each table, rewrite the sequence in the form of three (3) bases per box.  
This will help you for when you move on to the steps to Protein Synthesis on the next assignment.

**DNA sequence #1: ACCGTAGGTCGAAAT**

<i>Original DNA</i>	ACC				
<i>New Copy of DNA</i>	TGG				

**DNA sequence #2: TACCGAGCTAGCTAT**

<i>Original DNA</i>					
<i>New Copy of DNA</i>					

**DNA sequence #3: CTCATTTGACTAACC**

<i>Original DNA</i>					
<i>New Copy of DNA</i>					